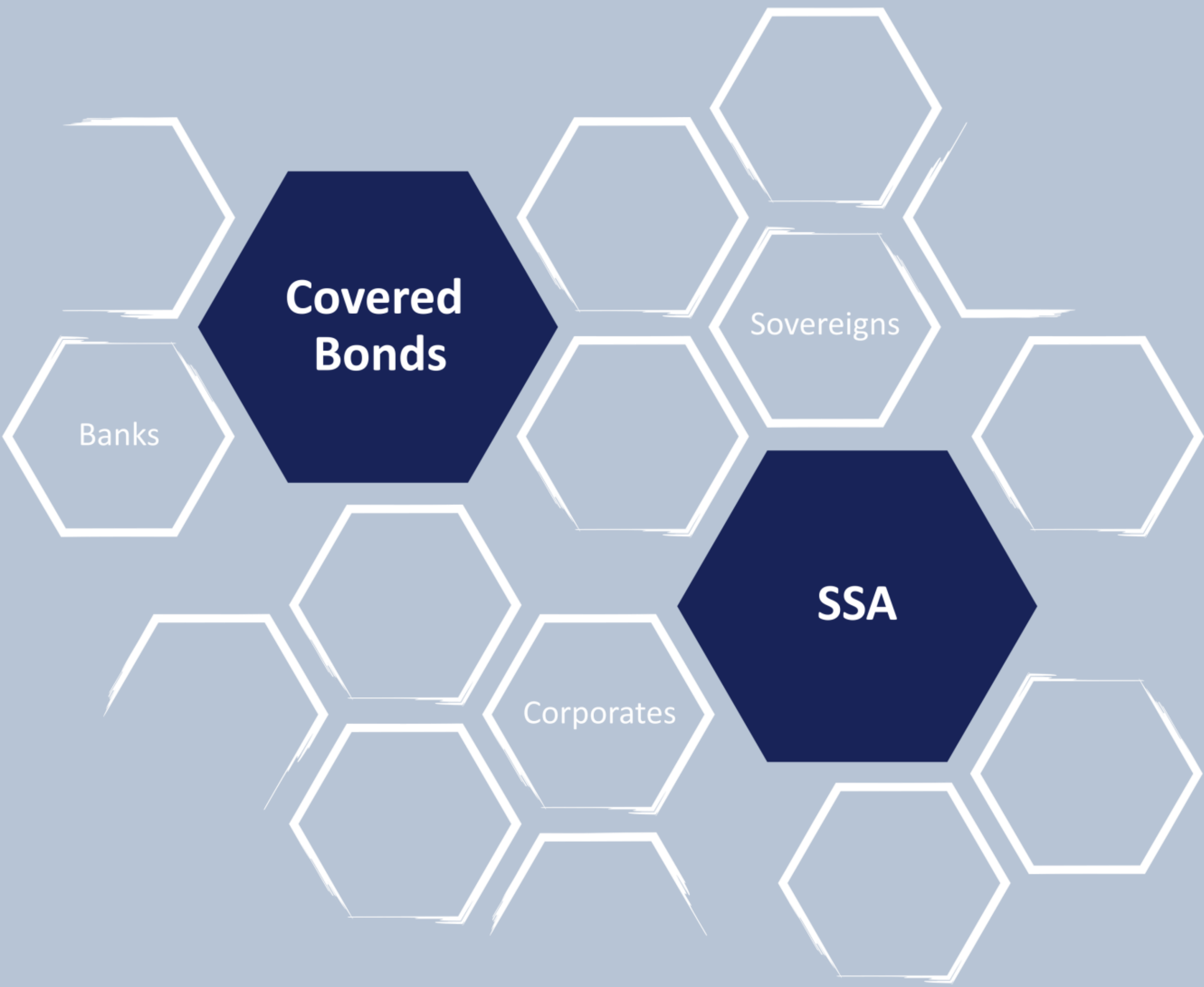
NORD/LB



Fixed Income Special

NORD/LB Markets Strategy & Floor Research

21 July 2022

Marketing communication (see disclaimer on the last pages)

Agenda

Floor analysts:

Covered Bonds/Banks

Dr Frederik Kunze
frederik.kunze@nordlb.de

Melanie Kiene, CIIA
melanie.kiene@nordlb.de

SSA/Public Issuers

Dr Norman Rudschuck, CIIA
norman.rudschuck@nordlb.de

Jan-Phillipp Hensing
jan-phillipp.hensing@nordlb.de

NORD/LB:
Markets Strategy & Floor Research

NORD/LB:
Covered Bond Research

NORD/LB:
SSA/Public Issuer Research

Bloomberg:
RESP NRDR <GO>

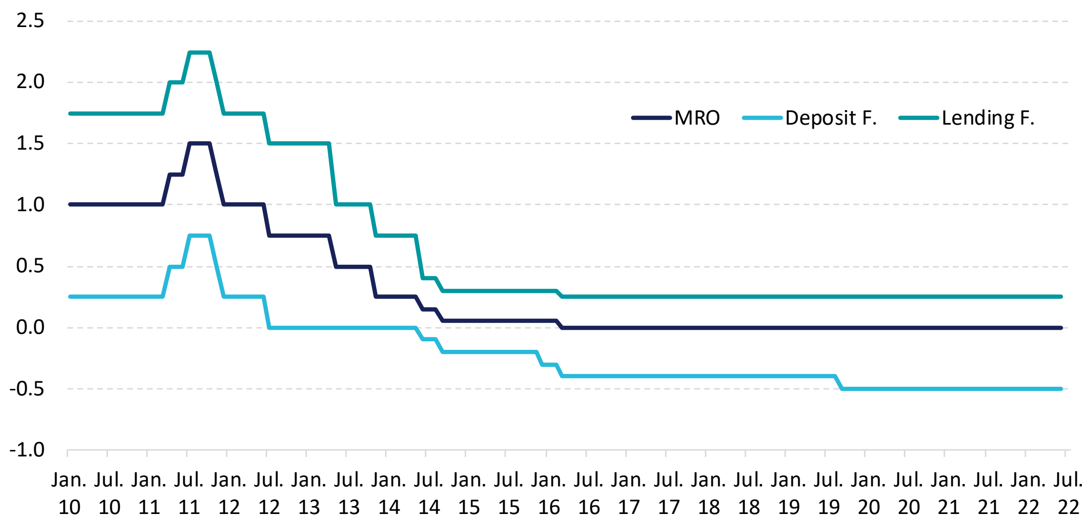
ECB frontloads rate hike by +50bp and breaches pre-commitment

Authors: Dr Frederik Kunze // Dr Norman Rudschuck, CIIA

ECB interest rate decision: Eleven years of rate cuts or sideways movement

The European Central Bank acted in the spirit of sequencing (first all net purchases end, then the key interest rates are raised) at its regular meeting today. This partially contradicts what it promised as recently as June: It did raise all three key interest rates in the early afternoon. However, the move was twice as large as had been announced at the June meeting. The ECB is thus breaking its own pre-commitment, and market reactions were mixed. However, the focus of market players today was by no means solely on interest rates, which will continue to move upward in September, October and December. There was still no end date for reinvestment under the terminated Asset Purchase Programme (APP) today either. APP reinvestments will continue beyond today's rate hike and will be maintained for as long as necessary, thereby maintaining favorable liquidity conditions and extensive monetary policy accommodation. There has also been much debate in advance about the scope (concrete or unlimited?) and conditionality (unconditional or partial loss of sovereignty?) of the new ECB crisis tool, which we address below.

The ECB's once symmetrical interest rate corridor has been unbalanced since 2015



Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

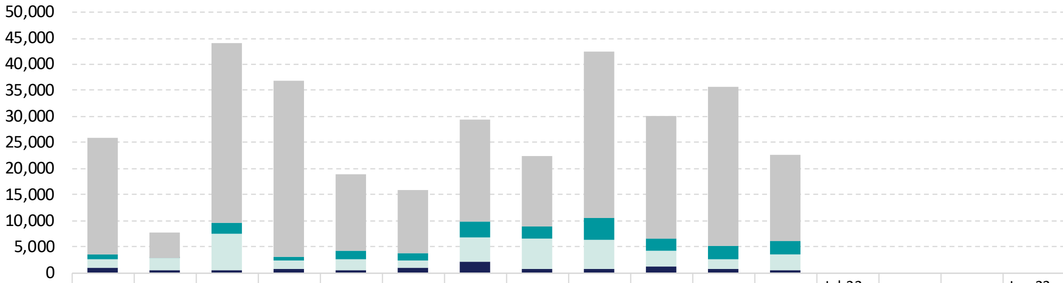
Farewell to the negative interest rates – it wasn't all bad with you

As expected, key interest rate adjustments were decided today, even more than had been commonly anticipated in the context of a 50:50 decision. Accordingly, the interest rates for the main refinancing operations, the marginal lending facility and the deposit facility will each rise by 50 basis points to 0.50%, 0.75% and 0.0%, respectively. The ECB has not raised interest rates for eleven years – welcome to the "new normal". After that, the symmetric corridor may be widened again in 2023 at the latest. The range of this corridor used to be at least 50-75 basis points both upward and downward. There is still a long way to go before a "new normal" is reached in 2023 or 2024 (target: 2.5% for MRO).

How much wiser are we now about upcoming reinvestments?

The ECB in wait and see mode – one might think. Our baseline scenario assumes that the ECB's Governing Council is giving considerable thought to the scope of the maturities under its two purchase programs (APP and PEPP). While it has clearly communicated under the PEPP that it will reinvest at least until the end of 2024 and thus there will be no balance sheet reduction, we have no idea how high the amount of all maturities will be until that end date. The suspicion is that these are in a similar range as for the APP. So we are talking about an average of EUR 25-30bn per month to support the spreads. In the APP, on the other hand, the data is always available for the next 12 months. For this manageable time horizon, we are thus talking about EUR 332.4 billion until the end of June 2023. The Eurosystem thus still acts like a vacuum cleaner for eligible bonds.

APP: Expected monthly maturities (in EURm)



	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-22 - Jun-23	2021	2022	Jan-23 - Jun-23
APP	26,009	7,770	44,014	36,948	18,860	15,812	29,328	22,493	42,533	30,101	35,785	22,763	332,416	247,069	298,614	183,003
PSPP	22,446	4,841	34,354	33,927	14,669	12,016	19,469	13,656	32,033	23,561	30,549	16,619	258,140	188,494	228,558	135,887
CSPP	978	196	2,155	674	1,557	1,416	2,940	2,182	4,219	2,380	2,566	2,504	23,767	17,134	17,337	16,791
CBPP3	1,629	2,227	6,873	1,651	2,167	1,487	4,786	5,977	5,631	2,937	1,874	3,108	40,347	30,143	41,244	24,313
ABSPP	956	506	632	696	467	893	2,133	678	650	1,223	796	532	10,162	11,298	11,475	6,012

Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Two things bother us: Intransparency and discrepancy with regard to APP versus PEPP

The ECB was also behind the curve until today, as central banks from Ottawa to London to Bern had already raised their key interest rates. Why do we keep capering on the topic of reinvestment? The Eurosystem's balance sheet is not shrinking at the moment, which distinguishes it from the U.S. Federal Reserve, for example. Therefore, we do not understand the ECB's lack of transparency why a) an end date (December 2024) is mentioned for the PEPP, but not the amount of the maturities, and b) for the APP the maturities are shown in detail for the next 12 months, but there is no predictability of the reinvestment period? This discrepancy bothers us. The ECB has often proven in the past that verbal interventions work. Nevertheless, the Governing Council is silent on this point and in our opinion there would have been no need for an anti-fragmentation tool at all if all degrees of freedom of reinvestment (keyword: breathing of the portfolio versus slavish adherence to the adjusted capital key) were used. For 2023, it is already clear that the average reinvestment requirement in the first six months is EUR 30.5 billion per month. This exceeds the full-year averages by far for 2021 (EUR 20.bn) and 2022 (EUR 24.bn). We also want to dispel the misconception of some market players that the ECB has literally withdrawn. This only applies to net purchases, as the trend in reinvestments is clearly upward for the time being due to the lagging nature of the maturities.

The new ECB tool: Transmission protection instrument

In particular, the ECB's crisis tool has been at the center of public debate in recent weeks with regard to the further course of monetary policy in the single currency area. The focus has regularly been on the trade-off between the effectiveness or the efficiency of the tool as perceived by financial market participants on the one hand and legal concerns regarding the consistency of the central bank's mandate on the other. Unsurprisingly, and also easily comprehensible from a historical point of view of the ECB's unconventional monetary policy, the focus was directed - not exclusively but certainly in particular – at the Bundesbank. In this respect, Joachim Nagel's thoughts on the limits of the crisis tool, which were already announced in the run-up to today's ECB meeting, could have pointed the way forward. Finally, the central banker pointed out that the inappropriateness of the spreads would have to be clearly proven and that there would have to be a disruption of the monetary policy transmission mechanism, which would ultimately hinder the ECB in fulfilling its mandate with regard to price level stability. If used, the tool should not interfere with monetary policy, he said. In addition, Nagel clarified his view that the conditions would have to be defined in such a way that the use would be purely monetary policy and government financing (even through the backdoor) would be excluded. He also said that the sustainability of member countries in terms of fiscal and economic policy must remain assured. What the ECB presented today cannot be compared with these requirements. For if the interest rate move reveals little dovish, on the other hand, the hawks were by no means at work on the crisis tool. Thus, the ECB opted for low conditionality and unlimited scope (see ECB: The Transmission Protection Instrument). This so-called TPI approved by the Council was placed directly in the context of the interest rate step in the statement, which, as we understand it, makes the "quid pro quo" between hawks (50 basis point hike) and doves (wide-ranging and low-conditionality TPI) quite clear. During the press conference, Lagarde did not tire of emphasizing that the transmission of monetary policy is paramount and that the goal is by no means to address looming redenomination risks. She also emphasized how pleased she was that the decision on the TPI was clear.

TLTRO III: ECB acts as a "silent observer"

In our ECB preview, we also highlighted our strong focus on the upcoming interest rate steps, APP reinvestments and the debate on a possible crisis tool. However, we additionally pointed out the other "construction sites". In this context, we thought and will continue to think primarily of the ECB's targeted longer-term refinancing operations (TLTROs), which were also launched as crisis tools. In its third edition (TLTRO III), the tool proved to be a P&L generator for some commercial banks, but it was also responsible for significant distortionary effects on the refinancing side. In the view of some ECB watchers, the opportunity for carry trades resulting from the terms and conditions of the tenders was a literal thorn in the side of the Governing Council. Once again, the statement did not directly reveal such reservations. According to the ECB's own statements, it continues to play the role of an observer, without the "smooth transmission of monetary policy being impaired". At the press conference, however, President Lagarde also referred to the passage in the ECB statement according to which the Governing Council would examine options for interest on excess liquidity.

The Governing Council is obviously not detached from the overall market environment
Even if the ECB's monetary policy mandate is clearly defined, this does not mean that the central bank of the euro area operates in a vacuum. And when we use this expression, we are also thinking of the pressure to act that is exerted on decision-makers from other currency areas – but not only. Even though the ECB's Governing Council announced its own interest rate turnaround back in June, other central banks on both sides of the Atlantic have already acted, in some cases on several occasions, and taken action to counteract the escalating rates of consumer price inflation. The main focus has repeatedly been on the U.S. Federal Reserve. In addition to the Fed (so far +150 basis points in 2022), the Bank of Canada (+225 basis points), the Swiss National Bank (+50 basis points) and the Bank of England (+100 basis points) have so far also turned the interest rate screw – and are holding out the prospect of even more. In the context of the most recent ECB key rate decision and the preceding discussions in the ECB Governing Council, we do not wish to minimize the significance of the guidance from the other currencies. However, it may be the partly home-made problems that make the environment even more challenging for the ECB's decision-makers. Today's resignation of Mario Draghi and Italy’s yield movements directly associated with it are certainly more than inconvenient here. The geopolitical upheavals and the associated fears of sustained economic setbacks could not and cannot be ignored either. In addition, some market participants were concerned about exchange rate developments. A weak euro may in principle be seen as a stimulus to the economy, but it also boosts inflation. Even though a direct influence on, for example, the EUR/USD exchange rate was not expected as a result of the meeting, the Council certainly gave more thought to the exchange rate impact of its own decisions and communications, which resulted in +50bp. This was reported by Lagarde as a look behind the curtain.

Implications of today's ECB decision for public sector issuers (SSAs)
We strongly believe that today's interest rate decision will not have a particularly negative impact on the funding conditions of supranationals, German Laender or, for example, KfW. Supras do not operate in any above described vacuum of any political tensions either, but if order books are oversubscribed several times, it is here in this subsegment. The German Laender are currently exercising restraint anyway, as they are using the summer break to take a look at their coffers and may in any case be found less frequently on the primary market in the second half of the year than was believed a few weeks ago. KfW, on the other hand, knew in its recently adjusted planning which interest rate steps were roughly in the offing and nevertheless decided to increase its funding target from EUR 80-85bn to EUR 90bn. The Frankfurt-based bank would not have announced this for H2/2022 if it believed that it would not be able to cover this demand on the international markets with its funding mix. Today's first interest rate step may have a different effect on other European regions, keyword "Beyond Bundeslaender". For some issuers, tax revenues may not be as abundant, and still others have tighter budgets than German Laender. The German federal treasury is also a "victim" of inflation: according to a confidential 2023 draft budget, around EUR 7.6bn will have to be reserved for the repayment of so-called inflation-linked bonds in the coming year. According to RND, that would be EUR 3bn more than in the current year and even almost EUR 7bn more than in 2021, when the inflation rate was still low.

Impact on the covered bond market

The simultaneous influence of the ECB's monetary policy on the covered bond market, which results or resulted from a siphoning off of supply (keyword: CBPP3) and a reduction of the publicly placed volume (keyword: TLTRO III), has already been highlighted several times in our comments. Today's meeting does not change our expectations with regard to the picture of the situation that should emerge in the context of a stronger withdrawal of the ECB in this regard. As a result, we see no need to adjust our issuance forecast (EUR 156bn of EUR benchmarks in 2022 in total). We also maintain our expectation of discreet spread widening across all jurisdictions by the end of 2022. Repricing will therefore also continue in the covered bond market. As a result of the market environment outlined above, which is characterized to a certain extent by the additive uncertainty factors already mentioned, we do not rule out temporary upward breakouts. However, we assume that the fundamental or market-technical view should prevail over sentiment-driven expansions, especially in the covered bond market. After all, we have seen this from time to time in the course of the current year.

Conclusion and comment

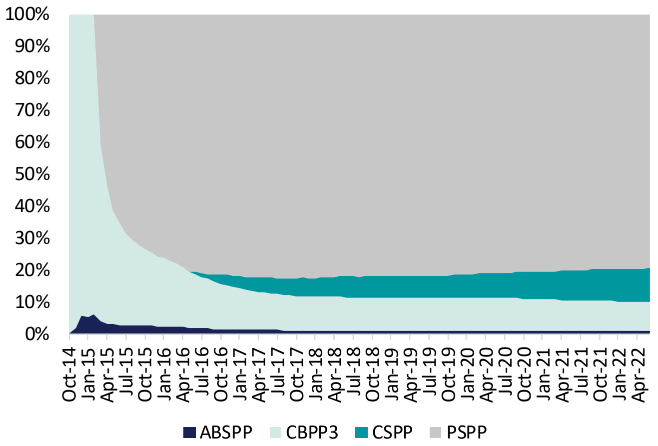
In the run-up to today’s key rate decision, there had already been much discussion about the extent of the rate step and the design of the new crisis tool, which we have now come to know as the "Transmission Protection Instrument" (TPI). At +50 basis points, the Governing Council certainly provided some surprise, suggesting that the hawks have prevailed on the rate hike to do some front loading contrary to the actual pre-commitment. On the other hand, the new addition of the TPI to the ECB's toolbox seems rather dovish, suggesting that we should speak of a compromise. However, Madame Lagarde did not tire of emphasizing during the press conference that the Council's actual intention was not to allow the tool to be used. The de facto end of forward guidance is also noteworthy, in that the ECB is now switching to making decisions on a monthly basis or from meeting to meeting depending on the data situation. This is already increasing uncertainty with regard to the September meeting. After the 50 basis points in July, an immediate thought could be that +25bp might "suffice" at the next meeting. On the other hand, continued high inflation rates and again upwardly adjusted inflation projections could swing the pendulum towards a new +50 or even +75bp. We expect a minimum of +50bp in September.

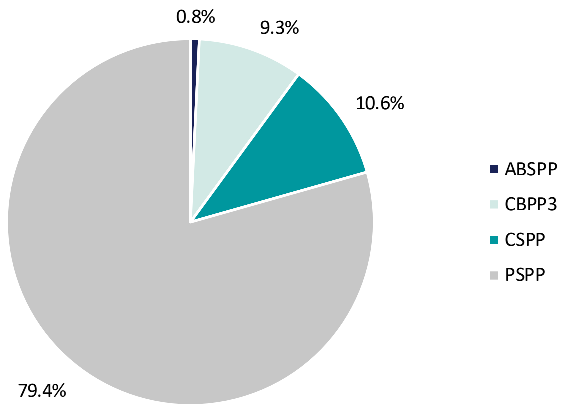
ECB tracker

Asset Purchase Programme (APP)

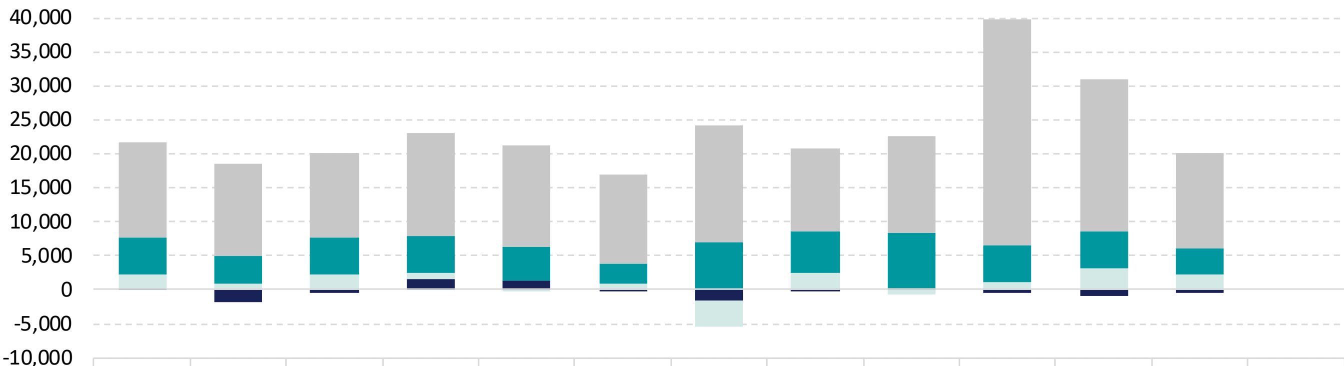
	ABSPP	CBPP3	CSPP	PSPP	APP
May-22	25,779	300,171	341,432	2,581,291	3,248,673
Jun-22	25,365	302,210	344,952	2,592,645	3,265,172
Δ	-371	+2,339	+3,858	+13,924	+19,750

Portfolio structure





Monthly net purchases (in EURm)

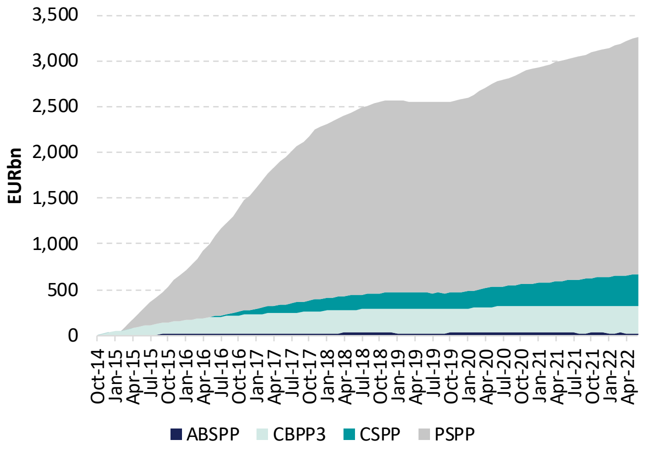


	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	∑
APP	21,597	16,749	19,659	23,017	21,200	16,596	18,838	20,698	21,929	39,397	30,232	19,750	269,662
PSPP	13,943	13,563	12,423	15,038	14,815	12,989	17,292	12,095	14,172	33,238	22,443	13,924	195,935
CSPP	5,502	3,936	5,590	5,481	5,142	3,007	6,970	6,272	8,042	5,461	5,366	3,858	64,627
CBPP3	2,011	999	2,184	1,008	-12	942	-3,761	2,376	-606	1,074	3,247	2,339	11,801
ABSPP	141	-1,749	-538	1,490	1,255	-342	-1,663	-45	321	-376	-824	-371	-2,701

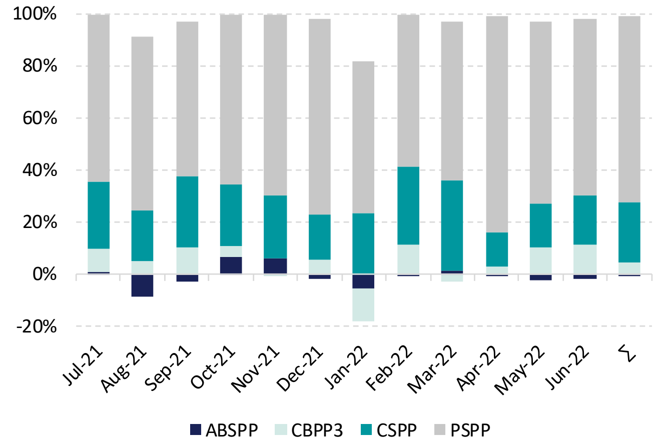
Source: ECB, NORD/LB Markets Strategy & Floor Research

NORD/LB

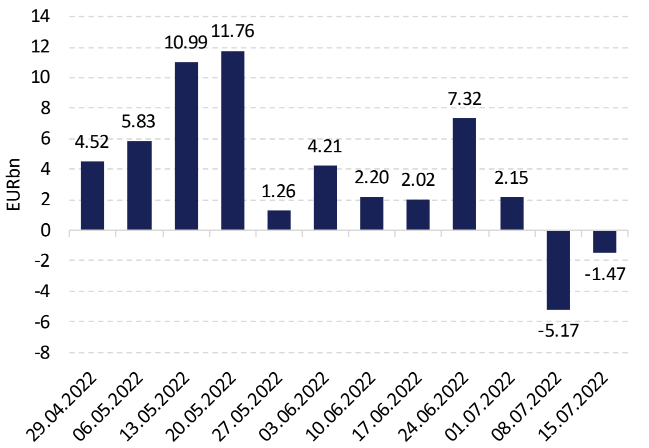
Portfolio development



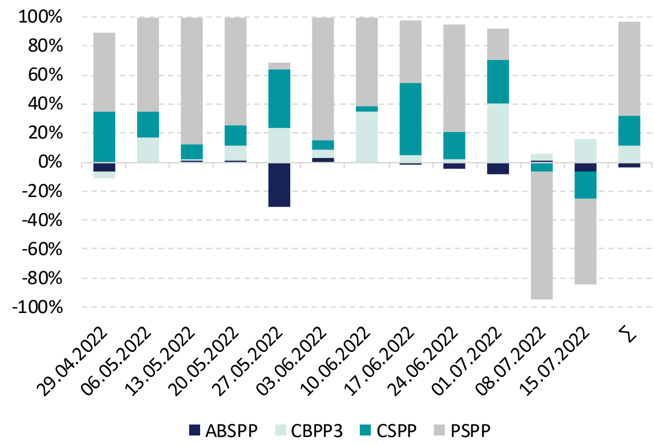
Distribution of monthly purchases



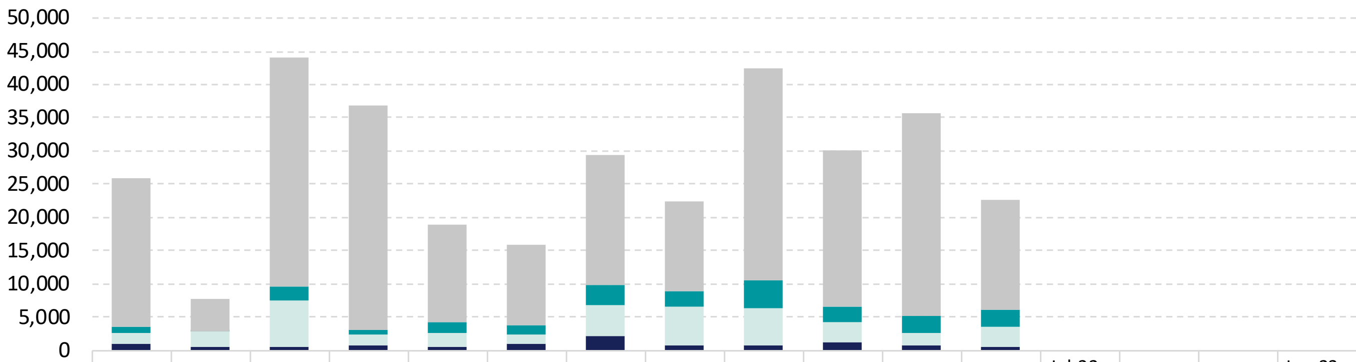
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

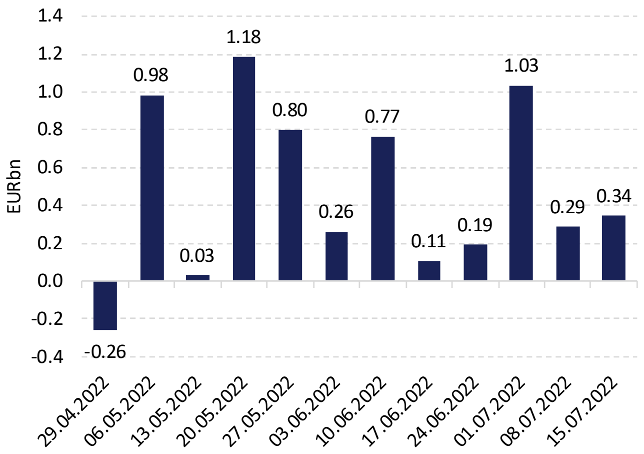


	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-22 - Jun-23	2021	2022	Jan-23 - Jun-23
APP	26,009	7,770	44,014	36,948	18,860	15,812	29,328	22,493	42,533	30,101	35,785	22,763	332,416	247,069	298,614	183,003
PSPP	22,446	4,841	34,354	33,927	14,669	12,016	19,469	13,656	32,033	23,561	30,549	16,619	258,140	188,494	228,558	135,887
CSPP	978	196	2,155	674	1,557	1,416	2,940	2,182	4,219	2,380	2,566	2,504	23,767	17,134	17,337	16,791
CBPP3	1,629	2,227	6,873	1,651	2,167	1,487	4,786	5,977	5,631	2,937	1,874	3,108	40,347	30,143	41,244	24,313
ABSPP	956	506	632	696	467	893	2,133	678	650	1,223	796	532	10,162	11,298	11,475	6,012

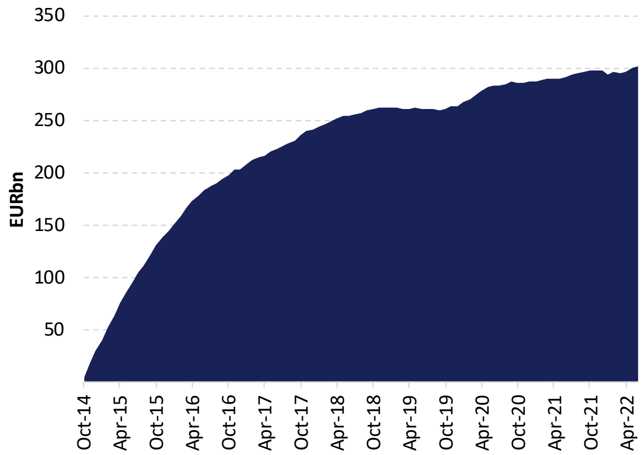
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

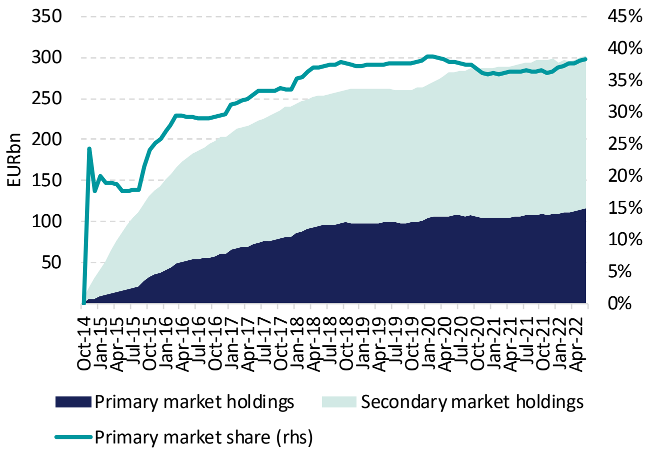
Weekly purchases



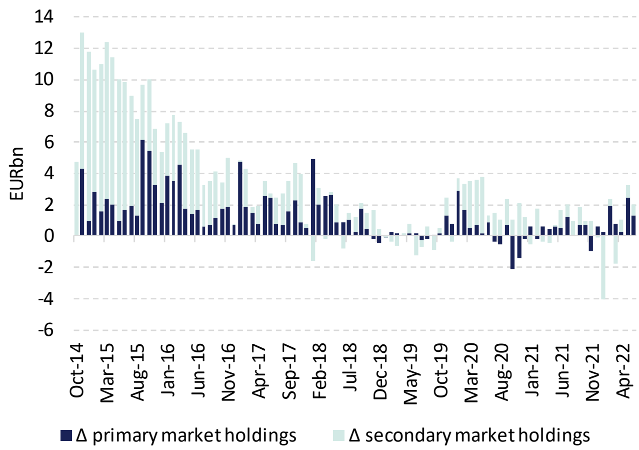
Development of CBPP3 volume



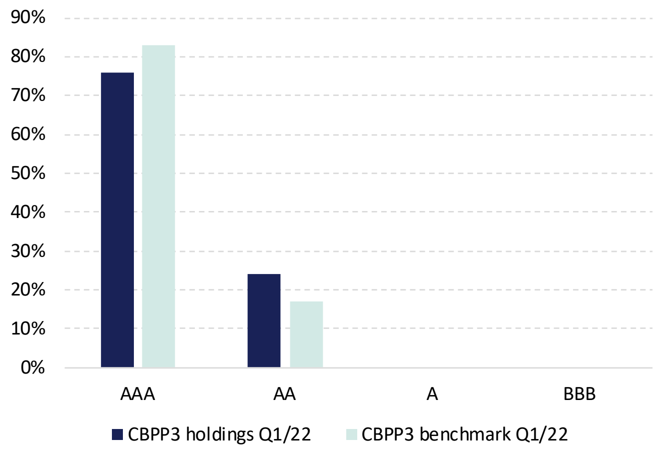
Primary and secondary market holdings



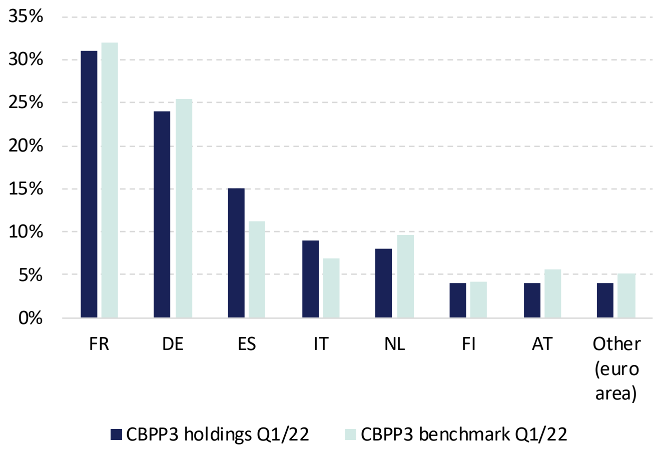
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



Distribution of CBPP3 by country of risk

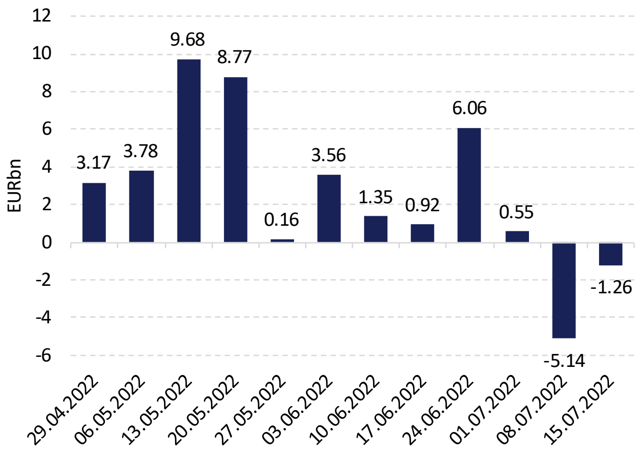


Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

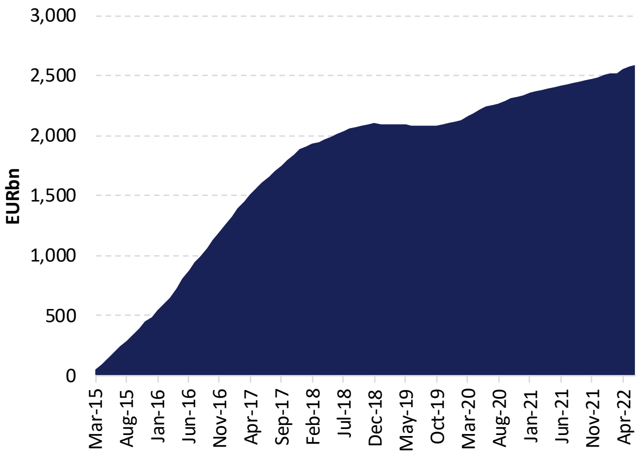
NORD/LB

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



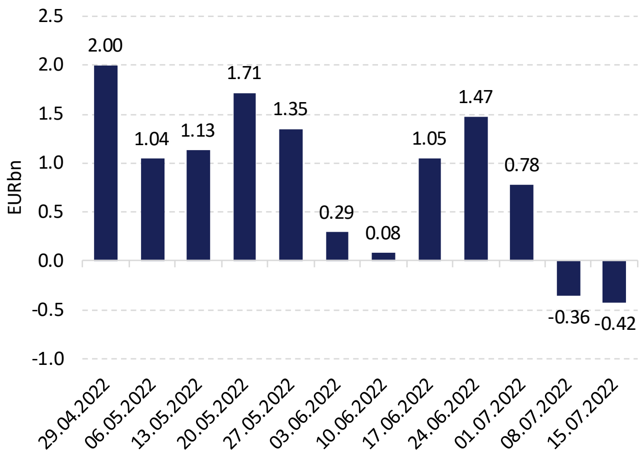
Overall distribution of PSPP buying at month-end

Jurisdiction	Adjusted distribution key[1]	Holdings (EURm)	Expected holdings (EURm)[2]	Difference (EURm)	Current WAM of portfolio[3] (in years)	WAM of eligible universe[4] (in years)	Difference (in years)
AT	2.7%	77,504	74,123	3,381	7.3	8.1	-0.8
BE	3.4%	94,970	92,265	2,705	7.5	9.9	-2.4
CY	0.2%	4,240	5,449	-1,209	8.5	8.9	-0.5
DE	24.3%	666,639	667,600	-961	6.7	8.0	-1.3
EE	0.3%	444	7,134	-6,690	8.1	8.1	0.0
ES	11.0%	315,066	301,988	13,078	8.0	8.2	-0.2
FI	1.7%	43,617	46,518	-2,901	7.9	8.9	-1.0
FR	18.8%	531,309	517,242	14,067	6.9	8.4	-1.5
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	42,418	42,885	-467	8.4	10.1	-1.7
IT	15.7%	447,979	430,231	17,748	7.2	7.8	-0.7
LT	0.5%	5,881	14,657	-8,776	10.6	10.4	0.1
LU	0.3%	3,777	8,342	-4,565	5.8	6.1	-0.3
LV	0.4%	3,772	9,868	-6,096	9.5	9.4	0.1
MT	0.1%	1,414	2,656	-1,242	11.1	9.8	1.3
NL	5.4%	132,716	148,414	-15,698	7.7	9.3	-1.6
PT	2.2%	54,982	59,273	-4,291	7.5	7.9	-0.4
SI	0.4%	10,775	12,194	-1,419	9.7	9.9	-0.2
SK	1.1%	18,171	29,003	-10,832	8.1	8.8	-0.7
SNAT	10.0%	288,595	274,427	14,168	8.2	9.4	-1.2
Total / Avg.	**100.0%**	**2,744,270**	**2,744,270**	**0**	**7.3**	**8.4**	**-1.1**

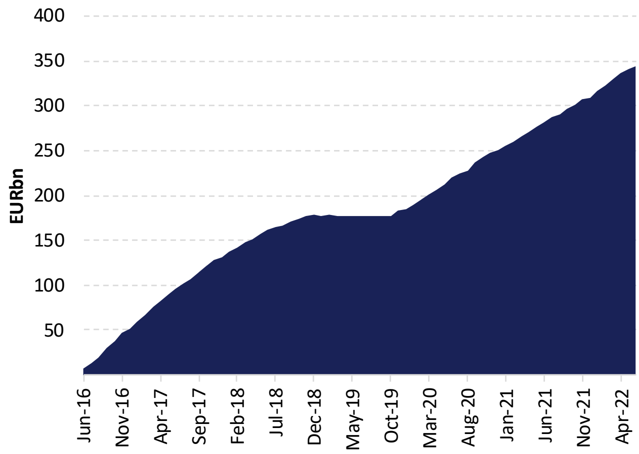
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of PSPP portfolio holdings
[4] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP
Source: ECB, NORD/LB Markets Strategy & Floor Research

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

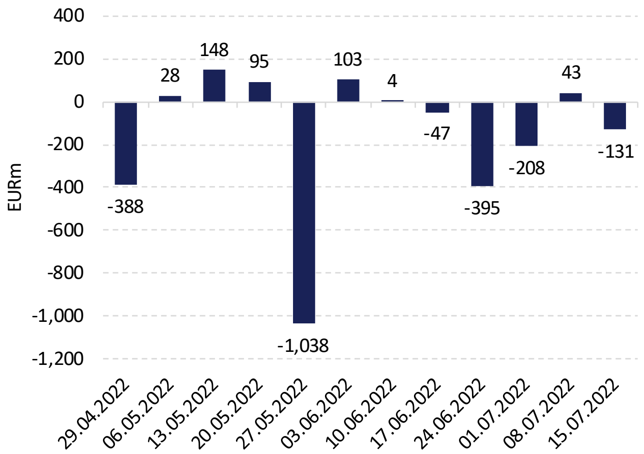


Development of CSPP volume

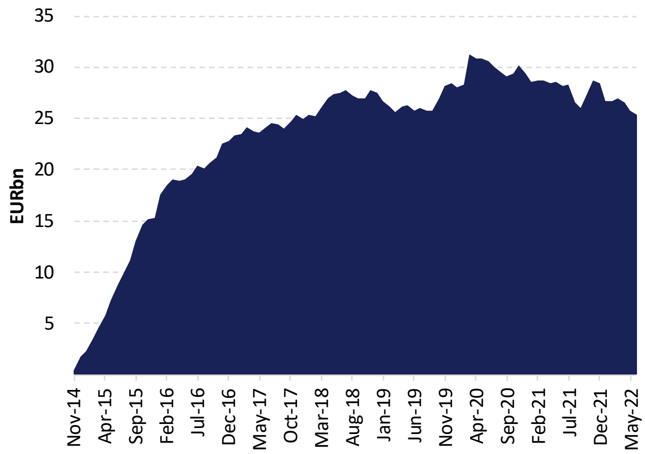


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

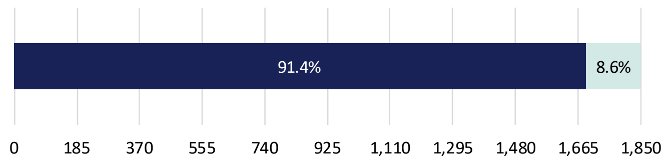
NORD/LB

Pandemic Emergency Purchase Programme (PEPP)

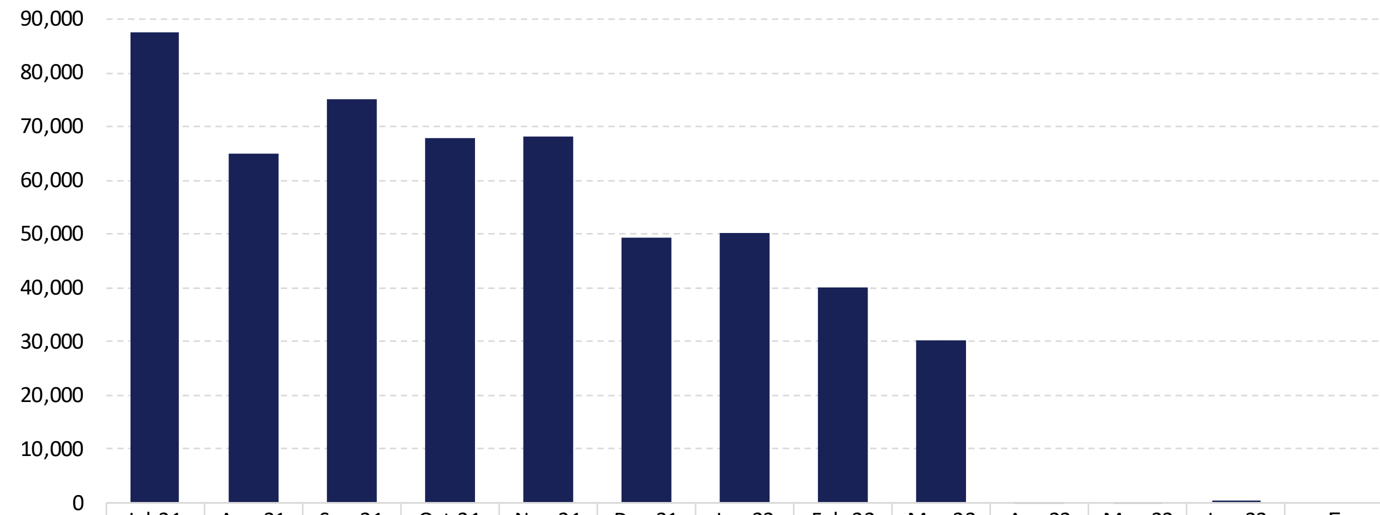
Holdings (in EURm)

	PEPP
May-22	1,718,061
Jun-22	1,718,074
Δ (net purchases)	+12

Invested share of PEPP envelope (in EURbn)

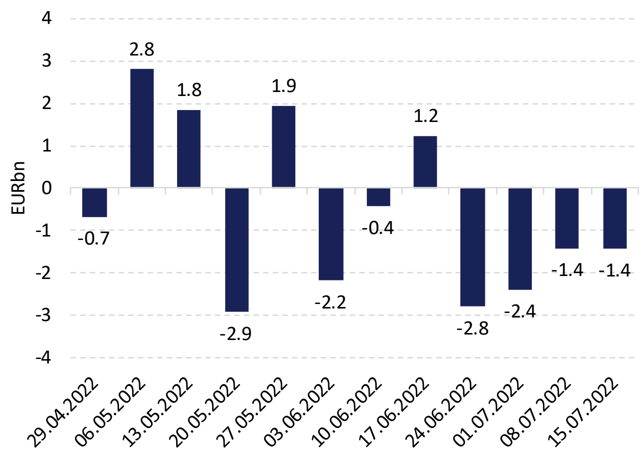


Monthly net purchases (in EURm)

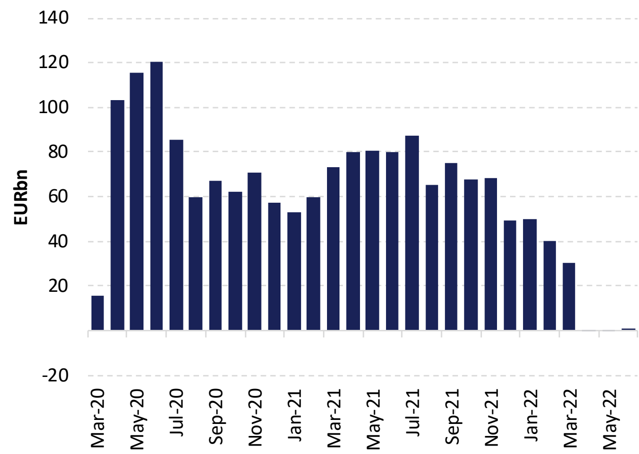


	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	∑
PEPP	87,557	65,050	75,051	67,855	68,045	49,375	50,113	40,184	30,214	-4	-10	12	533,442

Weekly purchases



Development of PEPP volume

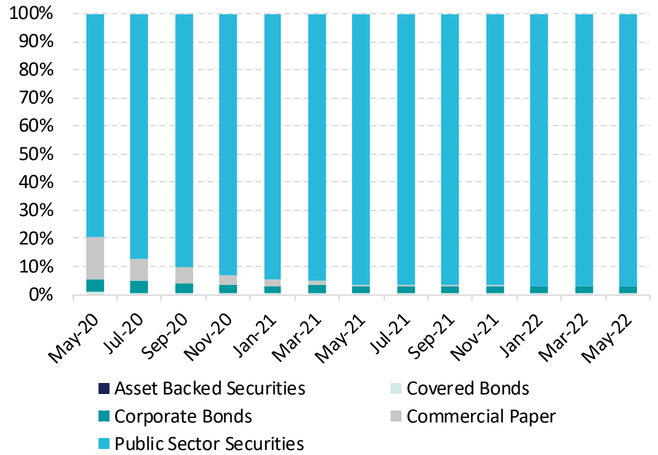


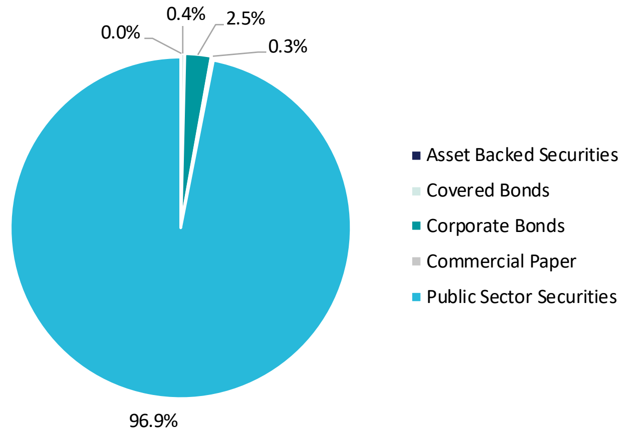
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

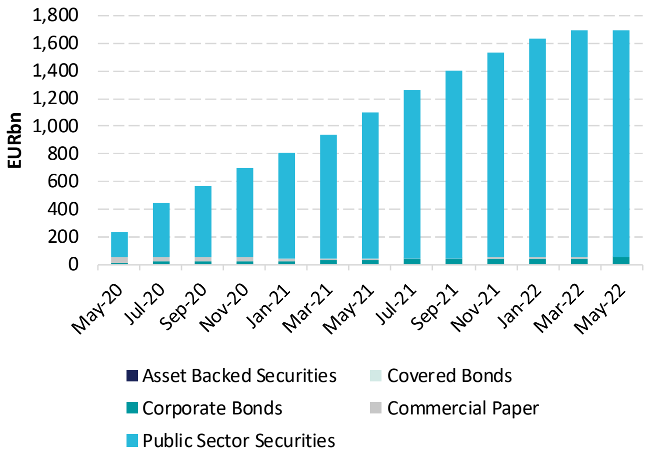
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Mar-22	0	6,067	40,313	5,862	1,644,247	1,696,489
May-22	0	6,067	41,825	4,352	1,644,230	1,696,474
Δ (net purchases)	0	0	+1,512	-1,510	-17	-14

Portfolio structure

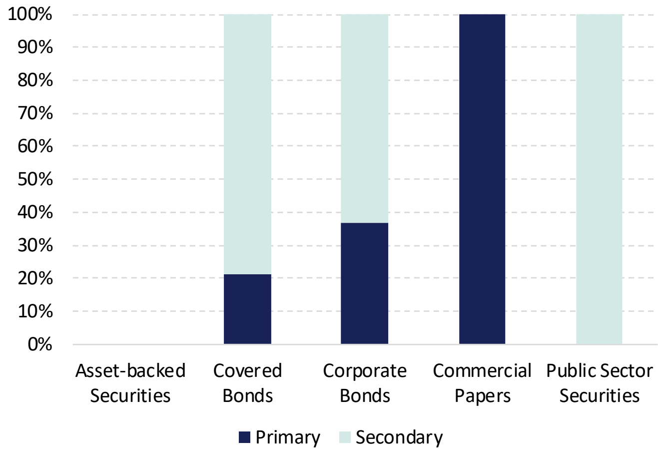




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

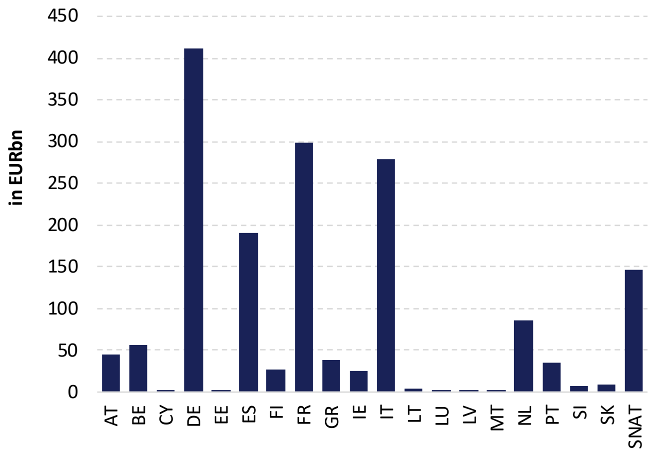
May-22	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	**Secondary**	**Primary**	**Secondary**	**Primary**	**Secondary**	**Primary**	**Secondary**
Holdings in EURm	0	0	1,298	4,769	15,332	26,493	4,353	0
Share	0.0%	0.0%	21.4%	78.6%	36.7%	63.3%	100.0%	0.0%

Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

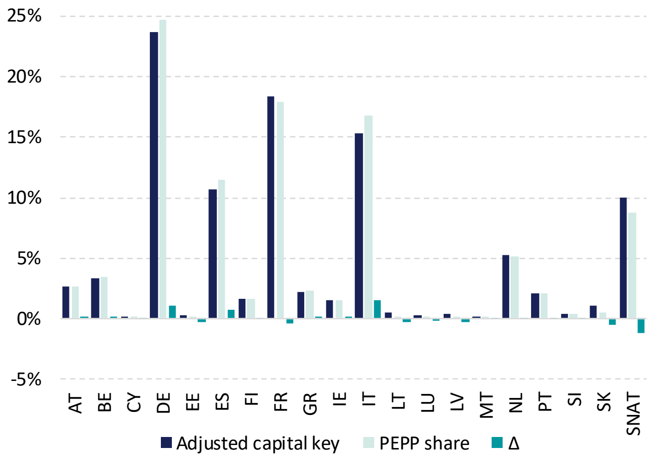
Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Adj. distribution key[1]	PEPP share	Deviations from the adj. distribution key[2]	Current WAM[3] (in years)	WAM of eligible universe[4] (in years)	Difference (in years)
AT	44,280	2.6%	2.7%	0.0%	7.8	7.3	0.5
BE	57,052	3.3%	3.4%	0.1%	6.5	8.9	-2.4
CY	2,464	0.2%	0.1%	0.0%	9.0	8.3	0.7
DE	412,492	23.7%	24.8%	1.0%	6.4	6.8	-0.4
EE	256	0.3%	0.0%	-0.2%	8.0	6.5	1.6
ES	190,463	10.7%	11.4%	0.7%	7.6	7.5	0.1
FI	26,918	1.7%	1.6%	0.0%	7.2	7.8	-0.6
FR	298,979	18.4%	17.9%	-0.4%	8.1	7.8	0.2
GR	38,677	2.2%	2.3%	0.1%	8.6	9.7	-1.0
IE	25,832	1.5%	1.6%	0.0%	9.0	9.2	-0.2
IT	279,302	15.3%	16.8%	1.5%	7.2	7.0	0.2
LT	3,216	0.5%	0.2%	-0.3%	10.1	9.6	0.5
LU	1,853	0.3%	0.1%	-0.2%	6.3	7.2	-0.9
LV	1,890	0.4%	0.1%	-0.2%	8.6	8.5	0.1
MT	609	0.1%	0.0%	-0.1%	10.9	9.1	1.8
NL	86,124	5.3%	5.2%	-0.1%	7.7	8.6	-0.9
PT	34,802	2.1%	2.1%	0.0%	6.8	7.1	-0.3
SI	6,532	0.4%	0.4%	0.0%	9.2	9.2	0.0
SK	7,966	1.0%	0.5%	-0.6%	8.8	8.3	0.5
SNAT	145,953	10.0%	8.8%	-1.2%	10.4	8.5	1.9
Total / Avg.	**1,665,660**	**100.0%**	**100.0%**	**0.0%**	**7.6**	**7.6**	**0.0**

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



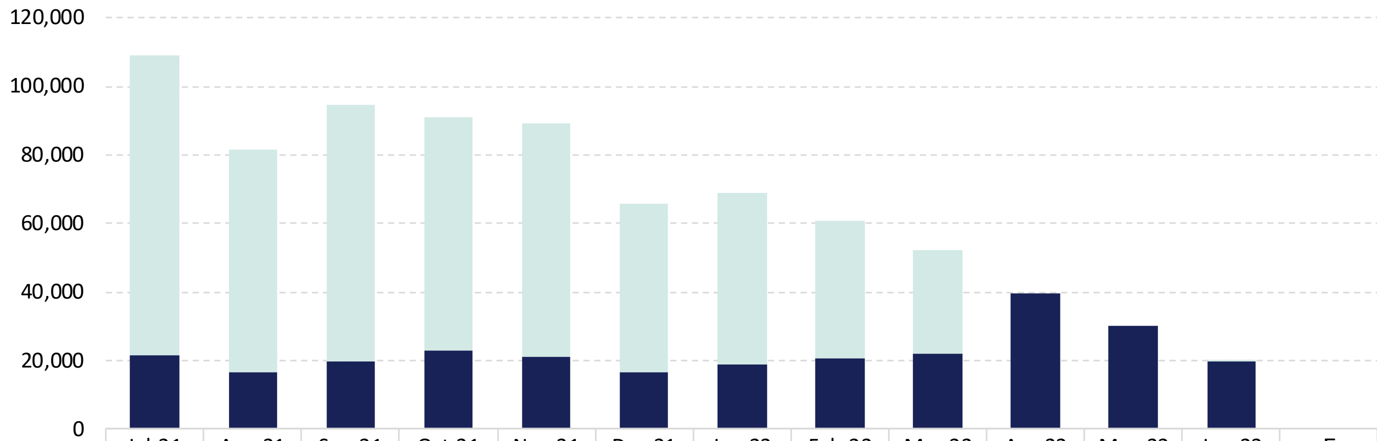
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Current WAM of public sector securities holdings under the PEPP [4] WAM of eligible universe of public sector securities holdings under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

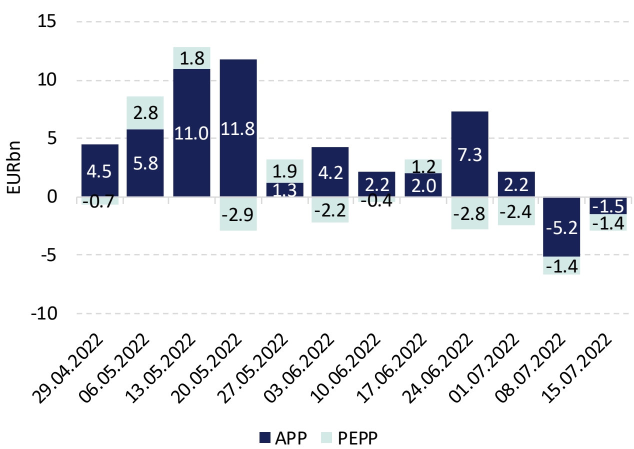
	APP	PEPP	APP & PEPP
May-22	3,248,673	1,718,061	4,966,734
Jun-22	3,265,172	1,718,074	4,983,246
Δ	+19,750	+12	+19,762

Monthly net purchases (in EURm)

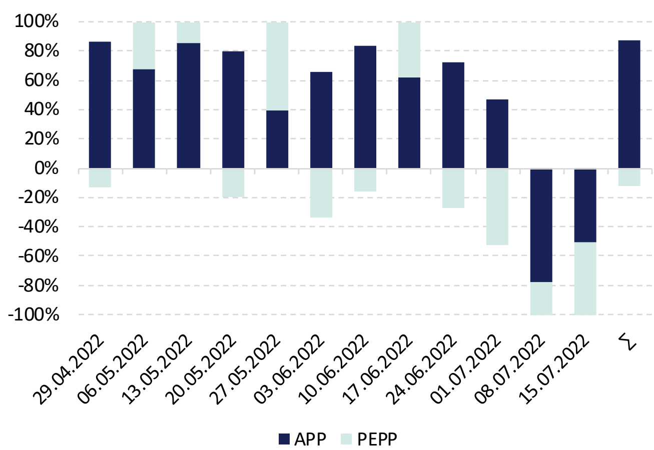


	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	∑
∑	109,154	81,799	94,710	90,872	89,245	65,971	68,951	60,882	52,143	39,393	30,222	19,762	803,104
PEPP	87,557	65,050	75,051	67,855	68,045	49,375	50,113	40,184	30,214	-4	-10	12	533,442
APP	21,597	16,749	19,659	23,017	21,200	16,596	18,838	20,698	21,929	39,397	30,232	19,750	269,662

Weekly purchases



Distribution of weekly purchases



Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

Appendix
Publication overview

Covered Bonds:

- **Issuer Guide Covered Bonds 2021**
- **Risk weights and LCR levels of covered bonds (updated semi-annually)**
- **Transparency requirements §28 PfandBG (quarterly update)**
- **Covered bonds as eligible collateral for central banks**

SSA/Public Issuers:

- **Issuer Guide – German Laender 2021**
- **Beyond Bundeslaender: Greater Paris (IDF/VDP)**
- **Spotlight on Belgian regions**
- **Spotlight on Spanish regions**

Fixed Income Specials:

- **ESG-Update 2022**
- **ECB ready for lift-off: Every journey starts with a first step**
- **Face-saving ECB decision: Hawks have won – for now**
- **ECB decision: PEPP benched for now, APP comes in as Point Guard**
- **ECB holds course, but ups the ante – PEPP running until 2022**

Appendix
Contacts at NORD/LB

Markets Strategy & Floor Research

Jan-Phillipp Hensing
SSA/Public Issuers

+49 172 425 2877
jan-phillipp.hensing@nordlb.de

Dr Frederik Kunze
Covered Bonds/Banks

+49 172 354 8977
frederik.kunze@nordlb.de

Melanie Kiene
Covered Bonds/Banks

+49 172 169 2633
melanie.kiene@nordlb.de

Dr Norman Rudschuck
SSA/Public Issuers

+49 152 090 24094
norman.rudschuck@nordlb.de

Sales

Institutional Sales	+49 511 9818-9440
Sales Sparkassen & Regionalbanken	+49 511 9818-9400
Sales MM/FX	+49 511 9818-9460
Sales Europe	+352 452211-515

Trading

Covereds/SSA	+49 511 9818-8040
Financials	+49 511 9818-9490
Governments	+49 511 9818-9660
Laender/Regionen	+49 511 9818-9550
Frequent Issuers	+49 511 9818-9640

Origination & Syndicate

Origination FI	+49 511 9818-6600
Origination Corporates	+49 511 361-2911

Sales Wholesale Customers

Firmenkunden	+49 511 361-4003
Asset Finance	+49 511 361-8150

Treasury

Collat. Management/Repos	+49 511 9818-9200
Liquidity Management	+49 511 9818-9620 +49 511 9818-9650

Disclaimer

The present report (hereinafter referred to as “information”) was drawn up by NORDDEUTSCHE LANDESBANK GIROZENTRALE (NORD/LB). The supervisory authorities responsible for NORD/LB are the European Central Bank (ECB), Sonnemannstraße 20, D-60314 Frankfurt am Main, and the Federal Financial Supervisory Authority in Germany (Bundesanstalt für Finanzdienstleitungsaufsicht; BaFin), Graurheindorfer Str. 108, D-53117 Bonn and Marie-Curie-Str. 24-28, D-60439 Frankfurt am Main. The present report and the products and services described herein have not been reviewed or approved by the relevant supervisory authority.

The present information is addressed exclusively to Recipients in Austria, Belgium, Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Indonesia, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Poland, Portugal, Singapore, Portugal, Spain, Sweden, Switzerland, the Republic of China (Taiwan), Thailand, the United Kingdom and Vietnam (hereinafter referred to as “Relevant Persons” or “Recipients”). The contents of the information are disclosed to the Recipients on a strictly confidential basis and, by accepting such information, the Recipients shall agree that they will not forward it to third parties, copy and/or reproduce this information without the prior written consent of NORD/LB. The present information is addressed solely to the Relevant Persons and any parties other than the Relevant Persons shall not rely on the information contained herein. In particular, neither this information nor any copy thereof shall be forwarded or transmitted to the United States of America or its territories or possessions, or distributed to any employees or affiliates of Recipients resident in these jurisdictions.

The present information does not constitute financial analysis within the meaning of Art. 36 (1) of the Delegate Regulation (EU) 2017/565, but rather represents a marketing communication for your general information **within the meaning of Art. 36 (2) of this Regulation. Against this background, NORD/LB expressly points out that this information has not been prepared in accordance with legal provisions promoting the independence of investment research and is not subject to any prohibition of trading following the dissemination of investment research.** Likewise, this information does not constitute an investment recommendation or investment strategy recommendation within the meaning of the Market Abuse Regulation (EU) No. 596/2014**.**

This report and the information contained herein have been compiled and are provided exclusively for information purposes. The present information is not intended as an investment incentive. It is provided for the Recipient’s personal information, subject to the express understanding, which shall be acknowledged by the Recipient, that it does not constitute any direct or indirect offer, recommendation, solicitation to purchase, hold or sell or to subscribe for or acquire any securities or other financial instruments nor any measure by which financial instruments might be offered or sold.

All actual details, information and statements contained herein were derived from sources considered reliable by NORD/LB. For the preparation of this information, NORD/LB uses issuer-specific financial data providers, own estimates, company information and public media. However, since these sources are not verified independently, NORD/LB cannot give any assurance as to or assume responsibility for the accuracy and completeness of the information contained herein. The opinions and prognoses given herein on the basis of these sources constitute a non-binding evaluation of the employees of the Markets Strategy & Floor Research division of NORD/ LB. Any changes in the underlying premises may have a material impact on the developments described herein. Neither NORD/LB nor its governing bodies or employees can give any assurances as to or assume any responsibility or liability for the accuracy, appropriateness and completeness of this information or for any loss of return, any indirect, consequential or other damage which may be suffered by persons relying on the information or any statements or opinions set forth in the present Report (irrespective of whether such losses are incurred due to any negligence on the part of these persons or otherwise).

Past performance is not a reliable indicator of future performance. Exchange rates, price fluctuations of the financial instruments and similar factors may have a negative impact on the value and price of and return on the financial instruments referred to herein or any instruments linked thereto. Fees and commissions apply in relation to securities (purchase, sell, custody), which reduce the return on investment. An evaluation made on the basis of the historical performance of any security does not necessarily provide an indication of its future performance.
The present information neither constitutes any investment, legal, accounting or tax advice nor any assurance that an investment or strategy is suitable or appropriate in the light of the Recipient’s individual circumstances, and nothing in this information constitutes a personal recommendation to the Recipient thereof. The securities or other financial instruments referred to herein may not be suitable for the Recipient’s personal investment strategies and objectives, financial situation or individual needs.

Moreover, the present report in whole or in part is not a sales or other prospectus. Accordingly, the information contained herein merely constitutes an overview and does not form the basis for any potential decision to buy or sell on the part of an investor. A full description of the details relating to the financial instruments or transactions which may relate to the subject matter of this report is given in the relevant (financing) documentation. To the extent that the financial instruments described herein are NORD/LB’s own issues and subject to the requirement to publish a prospectus, the conditions of issue applicable to any individual financial instrument and the relevant prospectus published with respect thereto as well NORD/LB’s relevant registration form, all of which are available for download at www.nordlb.de and may be obtained free of charge from NORD/LB, Georgsplatz 1, 30159 Hanover, shall be solely binding. Furthermore, any potential investment decision should be made exclusively on the basis of such (financing) documentation. The present information cannot replace personal advice. Before making an investment decision, each Recipient should consult an independent investment adviser for individual investment advice with respect to the appropriateness of an investment in financial instruments or investment strategies subject to this information as well as for other and more recent information on certain investment opportunities.

Each of the financial instruments referred to herein may involve substantial risks, including capital, interest, index, currency and credit risks in addition to political, fair value, commodity and market risks. The financial instruments could experience a sudden and substantial deterioration in value, including a total loss of the capital invested. Each transaction should only be entered into on the basis of the relevant investor’s assessment of his or her individual financial situation as well as of the suitability and risks of the investment.

NORD/LB and its affiliated companies may participate in transactions involving the financial instruments described in the present information or their underlying basis values for their own account or for the account of third parties, may issue other financial instruments with the same or similar features as those of the financial instruments presented in this information and may conduct hedging transactions to hedge positions. These measures may affect the price of the financial instruments described in the present information.

If the financial instruments presented in this information are derivatives, they may, depending on their structure, have an initial negative market value from the customer's perspective at the time the transaction is concluded. NORD/LB further reserves the right to transfer its economic risk from a derivative concluded with it to a third party on the market by means of a mirror-image counter transaction.

More detailed information on any commission payments which may be included in the selling price can be found in the “Customer Information on Securities Business" brochure, which is available to download at www.nordlb.de.

The information contained in the present report replaces all previous versions of corresponding information and refers exclusively to the time of preparation of the information. Future versions of this information will replace this version. NORD/LB is under no obligation to update and/or regularly review the data contained in such information. No guarantee can therefore be given that the information is up-to-date and continues to be correct.
By making use of this information, the Recipient shall accept the terms and conditions outlined above.

NORD/LB is a member of the protection scheme of Deutsche Sparkassen-Finanzgruppe. Further information for the Recipient is indicated in clause 28 of the General Terms and Conditions of NORD/LB or at www.dsgv.de/sicherungssystem.

Additional information for Recipients in Australia:
NORD/LB IS NOT A BANK OR DEPOSIT TAKING INSTITUTION AUTHORISED UNDER THE 1959 BANKING ACT OF AUSTRALIA. IT IS NOT SUPERVISED BY THE AUSTRALIAN PRUDENTIAL REGULATION AUTHORITY. NORD/LB does not provide personal advice with this information and does not take into account the objectives, financial situation or needs of the Recipient (other than for the purpose of combating money laundering).

Additional information for Recipients in Austria:
None of the information contained herein constitutes a solicitation or offer by NORD/LB or its affiliates to buy or sell any securities, futures, options or other financial instruments or to participate in any other strategy. Only the published prospectus pursuant to the Austrian Capital Market Act should be the basis for any investment decision of the Recipient. For regulatory reasons, products mentioned herein may not be on offer in Austria and therefore not available to investors in Austria. Therefore, NORD/LB may not be able to sell or issue these products, nor shall it accept any request to sell or issue these products to investors located in Austria or to intermediaries acting on behalf of any such investors.

Additional information for Recipients in Belgium:
Evaluations of individual financial instruments on the basis of past performance are not necessarily indicative of future results. It should be noted that the reported figures relate to past years.

Additional information for Recipients in Canada:
This report has been prepared solely for information purposes in connection with the products it describes and should not, under any circumstances, be construed as a public offer or any other offer (direct or indirect) to buy or sell securities in any province or territory of Canada. No financial market authority or similar regulatory body in Canada has made any assessment of these securities or reviewed this information and any statement to the contrary constitutes an offence. Potential selling restrictions may be included in the prospectus or other documentation relating to the relevant product.

Additional information for Recipients in Cyprus:
This information constitutes an analysis within the meaning of the section on definitions of the Cyprus Directive D1444-2007-01 (No. 426/07). Furthermore, this information is provided for information and promotional purposes only and does not constitute an individual invitation or offer to sell, buy or subscribe to any investment product**.**

Additional information for Recipients in the Czech Republic:
There is no guarantee that the invested amount will be recouped. Past returns are no guarantee of future results. The value of the investments may rise or fall. The information contained herein is provided on a non-binding basis only and the author does not guarantee the accuracy of the content.

Additional information for Recipients in Denmark:
This Information does not constitute a prospectus under Danish securities law and consequently is not required to be, nor has been filed with or approved by the Danish Financial Supervisory Authority, as this Information either (i) has not been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market within the meaning of the Danish Securities Trading Act or any executive orders issued pursuant thereto, or (ii) has been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market in reliance on one or more of the exemptions from the requirement to prepare and publish a prospectus in the Danish Securities Trading Act or any executive orders issued pursuant thereto.

Additional information for Recipients in Estonia:
It is advisable to closely examine all the terms and conditions of the services provided by NORD/LB. If necessary, Recipients of this information should consult an expert.

Additional information for Recipients in Finland:
The financial products described herein may not be offered or sold, directly or indirectly, to any resident of the Republic of Finland or in the Republic of Finland, except pursuant to applicable Finnish laws and regulations. Specifically, in the case of shares, such shares may not be offered or sold, directly or indirectly, to the public in the Republic of Finland as defined in the Finnish Securities Market Act (746/2012, as amended). The value of investments may go up or down. There is no guarantee of recouping the amount invested. Past performance is no guarantee of future results.

Additional information for Recipients in France:
NORD/LB is partially regulated by the "Autorité des Marchés Financiers" for the conduct of French business. Details concerning the extent of our regulation by the respective authorities are available from us on request. The present information does not constitute an analysis within the meaning of Article 24 (1) Directive 2006/73/EC, Article L.544-1 and R.621-30-1 of the French Monetary and Financial Code, but does represent a marketing communication and does qualify as a recommendation pursuant to Directive 2003/6/EC and Directive 2003/125/EC.

Additional information for Recipients in Greece:
The information contained herein gives the view of the author at the time of publication and may not be used by its Recipient without first having confirmed that it remains accurate and up to date at the time of its use. Past performance, simulations or forecasts are therefore not a reliable indicator of future results. Investment funds have no guaranteed performance and past returns do not guarantee future performance.

Additional information for Recipients in Indonesia:
This report contains generic information and has not been tailored to the circumstances of any individual or specific Recipient. This information is part of NORD/LB's marketing material.

Additional information for Recipients in the Republic of Ireland:
This information has not been prepared in accordance with Directive (EU) 2017/1129 (as amended) on prospectuses (the "Prospectus Directive") or any measures made under the Prospectus Directive or the laws of any Member State or EEA treaty adherent state that implement the Prospectus Directive or such measures and therefore may not contain all the information required for a document prepared in accordance with the Prospectus Directive or the laws.

Additional information for Recipients in Japan:
This information is provided to you for information purposes only and does not constitute an offer or solicitation of an offer to enter into securities transactions or commodity futures transactions. Although the actual data and information contained herein has been obtained from sources which we believe to be reliable and trustworthy, we are unable to vouch for the accuracy and completeness of this actual data and information.

Additional information for Recipients in South Korea:
This information has been provided to you free of charge for information purposes only. The information contained herein is factual and does not reflect any opinion or judgement of NORD/LB. The information contained herein should not be construed as an offer, marketing, solicitation to submit an offer or investment advice with respect to the financial investment products described herein.

Additional information for Recipients in Luxembourg:
Under no circumstances shall the present information constitute an offer to purchase or issue or the solicitation to submit an offer to buy or subscribe for financial instruments and financial services in Luxembourg.

Additional information for Recipients in New Zealand:
NORD/LB is not a bank registered in New Zealand. This information is for general information only. It does not take into account the Recipient's financial situation or objectives and is not a personalised financial advisory service under the 2008 Financial Advisers Act.

Additional information for Recipients in the Netherlands:
The value of your investment may fluctuate. Past performance is no guarantee for the future.

Additional information for Recipients in Poland:
This information does not constitute a recommendation within the meaning of the Regulation of the Polish Minister of Finance Regarding Information Constituting Recommendations Concerning Financial Instruments or Issuers thereof dated 19 October 2005.

Additional information for Recipients in Portugal:
This information is intended only for institutional clients and may not be (i) used by, (ii) copied by any means or (iii) distributed to any other kind of investor, in particular not to retail clients. The present information does not constitute or form part of an offer to buy or sell any of the securities covered by the report, nor should it be understood as a request to buy or sell securities where that practice may be deemed unlawful. The information contained herein is based on information obtained from sources which we believe to be reliable, but is not guaranteed as to accuracy or completeness. Unless otherwise stated, all views contained herein relate solely to our research and analysis and are subject to change without notice.

Additional information for Recipients in Sweden:
This information does not constitute (or form part of) a prospectus, offering memorandum, any other offer or solicitation to acquire, sell, subscribe for or otherwise trade in shares, subscription rights or other securities, nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. The present information has not been approved by any regulatory authority. Any offer of securities will only be made pursuant to an applicable prospectus exemption under the EC Prospectus Directive (Directive (EU) 2017/1129), and no offer of securities is being directed to any person or investor in any jurisdiction where such action is wholly or partially subject to legal restrictions or where such action would require additional prospectuses, other offer documentation, registrations or other actions.

Additional information for Recipients in Switzerland:
This information has not been approved by the Federal Banking Commission (merged into the Swiss Financial Market Supervisory Authority (FINMA) on 1 January 2009). NORD/LB will comply with the Directives of the Swiss Bankers Association on the Independence of Financial Research (as amended). The present information does not constitute an issuing prospectus pursuant to article 652a or article 1156 of the Swiss Code of Obligations. The information is published solely for the purpose of information on the products mentioned herein. The products do not qualify as units of a collective investment scheme pursuant to the Federal Act on Collective Investment Schemes (CISA) and are therefore not subject to supervision by FINMA.

Additional information for Recipients in the Republic of China (Taiwan):
This information is provided for general information only and does not take into account the individual interests or requirements, financial status and investment objectives of any specific investor. Nothing herein should be construed as a recommendation or advice for you to subscribe to a particular investment product. You should not rely solely on the information provided herein when making your investment decisions. When considering any investment, you should endeavour to make your own independent assessment and determination on whether the investment is suitable for your needs and seek your own professional financial and legal advice. NORD/LB has taken all reasonable care in producing this report and trusts that the information is reliable and suitable for your situation at the date of publication or delivery. However, no guarantee of accuracy or completeness is given. To the extent that NORD/LB has exercised the due care of a good administrator, we accept no responsibility for any errors, omissions, or misstatements in the information given. NORD/LB does not guarantee any investment results and does not guarantee that the strategies employed will improve investment performance or achieve your investment objectives.

Information for Recipients in the United Kingdom:
NORD/LB is subject to partial regulation by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA). Details of the scope of regulation by the FCA and the PRA are available from NORD/LB on request. The present information is "financial promotion". Recipients in the United Kingdom should contact the London office of NORD/LB, Investment Banking Department, telephone: 0044 / 2079725400, in the event of any queries. An investment in financial instruments referred to herein may expose the investor to a significant risk of losing all the capital invested.

Time of going to press: Thursday, 21 July 2022 (16:23h)